# RESEARCH HIGHLIGHT

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## Fire Prevention in Aboriginal Communities

#### INTRODUCTION

The First Nations per capita fire incidence rate is 2.4 times the per-capita rate for the rest of Canada. The death rate is 10.4 times greater; the fire injury rate is 2.5 times greater; and the fire damage per unit is 2.1 times greater. This research examined the reasons for these statistics. It also documents the fire prevention needs and best practices of Aboriginal communities, both on- and off-reserve in Canada, with a view to providing guidance to housing managers in Aboriginal communities.

Based on this research, Canada Mortgage and Housing Corporation has published an Aboriginal Fire Prevention Manual for housing managers and a film on DVD for community members.

### METHODOLOGY

There were several components to this project:

- A literature review concerning fire prevention in general and specific to Aboriginal communities. Researchers examined the websites and information brochures of some thirty organizations.
- Interviews of key informants, including the Aboriginal Firefighters Association, the Canadian Association of Fire Chiefs, the Manitoba Association of Native Firefighters and the Ontario Native Fire Fighters Society.
- Case studies in 10 Aboriginal communities.
- An Aboriginal Fire Prevention Manual was produced for use by housing managers.
- A DVD film specifically geared to an Aboriginal audience was produced with the goal of providing practical information concerning fire prevention to community members.

#### RESULTS

Statistics show that Aboriginal communities across the country have a high incidence of fires. CMHC Canadian Housing Fire Statistics Report details the incidence of fire and its effects, and suggests that overcrowding and the inaccessibility of remote location are two of the main reasons for the high incidence of fires in Aboriginal communities and the more severe consequences.

Many Aboriginal communities also tend to have a low number of smoke detectors. One community that was surveyed for this study was able to obtain government funding to buy a smoke detector for every house in the community. Two other communities conducted regular inspections to make sure that existing smoke detectors were in working order.

Wood stove use is prevalent in Aboriginal communities and, as is the case in non-Aboriginal communities, the wood stoves are often poorly maintained or improperly installed. One volunteer fire department surveyed held education programs on wood stove maintenance and also conducted inspections to make sure the wood stoves in the community were properly installed and in good working order.

Surveys have found that children and teenagers frequently describe life on-reserve as "boring," which can lead understimulated youths to experiment with fire. Communities have found that welcoming youths into fire halls has helped raise their interest in fire prevention.

See "Canadian Housing Fire Statistics" (2004), Canada Mortgage and Housing Corporation. Available from www.cmhc.ca





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The Northwest Territories community of Behchoko established its own juvenile fire setter prevention program, borrowing from others that already existed, including that of the First Nations' Emergency Services Society (FNESS) of British Columbia. This program includes interviews with children who have shown potential for becoming arsonists, along with their parents.

When the community of Haines Junction in Yukon had a very aggressive fire that took three days to be put out, community leaders decided something had to be done and started the FireSmart program. FireSmart runs on the philosophy that if you clear the brush away from communities, low-level grass and brush fires will have almost no potential to spread. The program uses members of the community, who might otherwise have to seek work elsewhere, to clear the brush so there's a sense of community ownership in the program. The project included training the workforce and has been successful.

The Nova Scotia First Nation of Indian Brook started its own fire prevention program after the community experienced three fire-related deaths due to human carelessness. The volunteer fire department developed an awareness campaign in which they distributed fire prevention materials door-to-door throughout the community. The firefighters used to have a very successful home inspection program where they would visit each home with a four page fire prevention check-list. If they discovered fire hazards they would point them out to the residents and do their best to rectify them.

The Kahnawáke First Nation in Quebec found that the number of residential fires it experienced decreased when the band started a program in which residents could buy their homes. The fire chief noted that pride of ownership greatly improved vigilance in fire prevention. Those with property insurance tend to follow the requirements for proper wood stove and chimney maintenance. The insurance company sends them a form based on one put together by the United States based, and internationally recognized, National Fire Protection Association. The Kahnawáke fire department offers to assist people in making sure their homes have the right materials to be fire safe, even going over blueprints to make sure the materials being used in the building process are safe and up to code.

Previously, many community members of Lower Nicola, British Columbia were setting fires in order to burn grass and yard waste. The fire department started a regular spring burn program after seeing too many grass and brush fires that threatened to turn into home fires. The volunteer firefighters made themselves available to people who wanted to do controlled <sup>1</sup> irning and spread the word in the community that they were available, thus reducing the risk.

The Moose Cree First Nation in Ontario was experiencing a high number of candle-related fires because residents liked the ambience and scent the candles gave off. The fire department instituted a candle-safety program while also encouraging people not to use candles at all. They instructed people to have the candle in a safe holder and to use a snuffer to put it out. In addition to its public speaking engagements and school visits, the fire department approached schools and restaurants in the community, and asked the teachers and owners not to burn candles, either for light during power outages or for atmosphere.

The Inuit community of Nain, in Northern Labrador, had a high incidence of chimney fires. The high cost of fuel in this remote community causes nearly everyone to use wood to heat their homes. Some ten years ago, the fire department bought a chimney brush for the use of residents, and firefighters made themselves available to help with cleaning if the residents couldn't do it themselves. The department used both word-of-mouth in the small community and media blitzes such as those done during fire prevention week to let people know about the availability of the brush, and the need to clean their chimneys regularly.

Just thirty years ago, the Rainy River First Nation in Ontario had no fire department. After helplessly watching a trapped resident die in a fire, two visionaries got together and established one. Today the fire department is equipped with a couple of trucks and more than a dozen volunteers. The most important legacy of the firefighting pioneers is the prevention ethic they instilled and today the community sees virtually no fires. The Rainy River First Nation's fire department is called more often to fight industrial fires at the mill outside of town than to fight fires in their own community.

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Poor insulation led to space heaters being used around the clock in Sagkeeng First Nation in Manitoba. Increased use of space heaters led to an increased potential for fires. An education program recommended cleaning heaters in the fall, shutting off electrical heaters mounted on the wall when leaving the home for any length of time, and keeping their heating sources free and clear of anything that can ignite, including clothing or mattresses. Regular home inspections, at first conducted every year, but now every few years, also helped to educate people about the importance of keeping secondary exits clear and accessible.

The White Cap Dakota First Nation in Saskatchewan has introduced a number of programs that have contributed to its record of 20 years with virtually no residential fires. A team of fire inspectors from the City of Saskatoon visit every home in the First Nations community once a year. Armed with long checklists, they go through all the potential fire hazards, advising residents. They check fire extinguishers, smoke alarms, clothes dryers, heating sources, and the accessibility of candles, matches and lighters to small children and pets. The White Cap First Nation volunteer fire department follows up six months later to see that people have made the necessary changes.

The fire chief also conducts a demonstration once a year where he starts a small fire on the grounds of the station and then shows the people how to use fire extinguishers. This is useful because in another community, such workshops identified the fact that some older people were too weak to break the pin and activate the fire extinguisher. That was something the firefighters were able to address by fitting nail clippers on to the devices.

#### CONCLUSION

Aboriginal communities can learn much about their unique challenges when it comes to fire prevention and fire safety by looking at the experiences of other Aboriginal communities.

Recognizing that practical knowledge and experience is the first step in such preventive efforts, CMHC's Fire Prevention in Aboriginal Communities Manual was developed by speaking with volunteer firefighters in ten different communities. The results of these discussions were then organized into case studies, each describing the prevention efforts of a particular community.

Among the many topics discussed in the Manual are candle safety, chimney maintenance, arson prevention and the beginning and growth of a volunteer firefighting squad. Volunteer firefighters and housing managers from Aboriginal communities will recognize many of these stories, getting inspiration from the varied experiences of their colleagues.

In addition to this Manual there is a DVD available for community members which addresses the common causes of house fires and suggests preventative methods. The Manual and DVD can be ordered free of charge by contacting CMHC at 1-800-668-2642.

Fire Prevention in Aboriginal Communities

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#### Housing Research at CMHC

Under Part IX of the National Housing Act, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research.

This fact sheet is one of a series intended to inform you of the nature and scope of CMHC's research.

To find more Research Highlights plus a wide variety of information products, visit our website at

#### www.cmhc.ca

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